

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-26 are pending in this application. Claims 1 and 13 are independent.

While vigorously traversing the outstanding rejection, the independent claims have been amended to further include features recited in original claims 4, 5, 8, 9, 16, 17, 20 and 21, and paragraph [0064] of the Applicant's description. Claims 4, 5, 8, 9, 16, 17, 20 and 21 are cancelled without prejudice, and the claim dependency recited in claims 6 and 18 has been amended accordingly. No new matter has been added.

Accordingly, claims 1-3, 6-7, 10-15, 18-19, and 22-26 remain in the application.

The subject matter of the independent claims stand rejected under 35 U.S.C. 102 as being anticipated by Ward et al (U.S. 6,824,321), hereinafter Ward. A number of other claims stand rejected under 35 U.S.C. 103 as being obvious in view of Ward, and one of Molne (U.S. 6,243,080), Ossia (U.S. 6,747,635) and Taylor (U.S. 7,151,528).

The amended claims are directed to a specific keyboard structure, and are not intended to pre-empt any general keyboard structure capable of interfacing with touch screens. While traversing the Examiner's objections, the amended claims specifically provide that each key of a plurality of keys comprises at least first and second surfaces and is moveable within a housing, in use, between a first position in which the key does not touch a touch-sensitive element, and a

second position in which the second surface of the key is displaced to actuate the touch-sensitive element, such that when the key is pressed at the first surface thereof by a user, the key is moved from the first position to the second position to actuate the touch-sensitive element; and that each key is lens-shaped to magnify the at least one part of images visible to the user therethrough, and wherein the first surface and second surface of each of the plurality of keys oppose each other and are convex in shape to define the lens shape of the key.

In particular, at page 4, paragraph 2 of the office action, the Examiner suggests that Figure 3 of Ward discloses a key having first and second surfaces that oppose each other and are convex in shape. However, Ward does not provide that the keys having the shape shown in Figure 3 are also "moveable within said housing", as required by the claim. Ward specifically notes with reference to the keypad assembly of Figure 3 that in forming the lower surface of the key, the surface is permanently collapsed and "[a]s a result, the keypad assembly registers a continuous key press making the keypad assembly, and the electronic device containing the keypad assembly, unusable" (see Ward, col. 1 line 64 to col. 2 line 16). Ward also does not describe any further properties of the keys illustrated in Figure 3 in detail.

Accordingly, withdrawal of the rejection under 35 U.S.C. 102 is respectfully requested.

It would also be erroneous for the Examiner to conclude that the claimed subject matter is obvious in view of Ward, taken alone or in combination with one or more of the other cited documents.

First, it is clear that after Ward explicitly considered the problem of a number of prior art systems, including the one described with reference to Figure 3. Ward then proceeds to teach a different solution that does not provide for

keys that are lens-shaped, wherein the first surface and second surface of each key oppose each other and are convex in shape to define the lens shape of the key. In fact, the keys taught by Ward are only "domed" on one surface. Accordingly, it is respectfully submitted that Ward clearly teaches away from the subject matter of the Applicant's claims.

The Applicant recognized the need to design a keyboard where the keys are configured to provide a number of functions simultaneously, but which would be relatively simple to manufacture. These functions include the ability to allow images to be seen through the keys, the ability to magnify such images, and the ability to contact the touch-sensitive element only when depressed by a user. It would be erroneous to suggest that the person of ordinary skill in the art would arrive at the specific key shape claimed by the Applicant, even if the skilled person were to hypothetically consider how the keys in Ward might be modified to provide a magnifying action, for example.

For example, the skilled person might choose to insert a magnifying element within the key, or to construct the key with certain material with an appropriate refractive index to achieve such magnifying function. These alternative approaches teach away from the Applicant's solution. There is no suggestion in the art that a key could or should be shaped such that it inherently provides a magnifying effect while also providing the other functions.

Conversely, the provision of a biconvex lens to provide a magnifying action in some arbitrary field of application, in itself, does not address the issue of how a key might be shaped so as to also effectively depress an underlying touch-sensitive element in keyboards of the type to which the claims are directed.

Accordingly, the lower convex surface of the Applicant's keys serves a dual purpose in that it, together with the convexly shaped upper surface, defines

the magnifying lens-shape of the key, and in that it also provides a precision touch footprint for the underlying touch-sensitive element.

It is further respectfully submitted that prior art keyboards having keys that incorporate pointed, finger-like protrusions on their lower surface in order to provide more precise contact with an underlying touch-sensitive element also teach away from the Applicant's specific key structure. These prior art keys are not generally designed to provide a magnifying effect, and arguably, the skilled person would resist modifying the lower surface of a key to widen it as in a biconvex lens, as intuitively, such modification might be feared to compromise the point contact precision afforded by the tip of the finger-like projection.

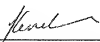
However, the Applicant realized that in certain applications, it is desirable to provide a solution that incorporates a lower convex surface that is able to facilitate both magnification of underlying images, as well as the contacting of an underlying touch-sensitive element with reasonable precision.

For the foregoing reasons, it is respectfully submitted that claims 1 and 13 recite combinations of features that are both novel and not obvious in view of the cited art, taken alone or in combination, and that the claims that remain in the application and that are dependent on claims 1 and 13 are also patentable for the same reasons. Withdrawal of the rejections under 35 U.S.C. 102 and 35 U.S.C. 103 is respectfully requested.

The Applicant respectfully submits that the application is now in form for allowance, and a Notice to that effect is earnestly solicited. However, if the Examiner deems that any issue remains after considering this response, he is kindly requested to contact the undersigned to expedite the prosecution and work out any such issue by telephone.

Appl. No. 10/785,999
Amdt. Dated June 14, 2007
Reply to Office Action of March 15, 2007

Respectfully submitted,
Bereskin & Parr
Agents for the Applicant

By 
Kerdrick Lo, Reg. No. 54,948
(416) 364-7311